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Handbook of Social Climate Indicators for the U.S. Army

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August 1991

Manpower and Personnel Policy Research Group
Manpower and Personnel Research Laboratory

U.S. Army Research Institute for the Behavioral and Social Sciences

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EDGAR M. JOHNSON
Technical Director

MICHAEL D. SHALER
COL, AR
Commanding

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Intersystems, Inc.

Technical review by

Beverly C. Harris
Laurel W. Oliver

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Handbook of Social Climate Indicators for the U.S. Army

**Robert Futterman, Mario Orlandi,
and Steven Schinke**

Intersystems, Inc.

**Manpower and Personnel Policy Research Group
Michael E. Benedict, Acting Chief**

**Manpower and Personnel Research Laboratory
Zita M. Simutis, Director**

U.S. Army Research Institute for the Behavioral and Social Sciences
5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600

Office, Deputy Chief of Staff for Personnel
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FOREWORD

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) conducts research designed to enhance the quality of the U.S. Army. Organizational research on the Army is often advanced by development of unique measurement scales for each effort or by adaption of scales developed for civilians. Because there is often insufficient time to develop psychometrically sound scales with accompanying norms, a handbook of measures and a model to guide further scale development is needed by Army researchers.

This work is part of the mission of the Manpower and Personnel Policy Research Group (MPPRG) of ARI's Manpower and Personnel Research Laboratory to aid the Army in effectively recruiting and retaining its personnel. As a part of this research program, a handbook of measures of the climate of the Army, as well as a measurement model to guide further efforts, will assist Army researchers in identifying appropriate scales for constructs such as job satisfaction, morale, motivation, organizational commitment, and general well-being. The development of standard scales will also avoid duplication of effort in separate research efforts that need to use the same constructs. The work reported here was arranged and funded through the Department of Defense Small Business Innovative Research Program.



EDGAR M. JOHNSON
Technical Director

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SOCIAL CLIMATE INDICATORS FOR THE U.S. ARMY

EXECUTIVE SUMMARY

Requirement:

Because there is often insufficient time to develop psychometrically sound scales with norms, the U.S. Army needs a handbook of measures of social climate, and a model to guide further scale development, in order to conduct organizational research. A model of the climate of the Army will aid researchers in identifying appropriate scales for constructs, such as job satisfaction, morale, motivation, organizational commitment, and general well-being. The development of standard scales will also avoid duplication of effort in research efforts that need to use the same constructs.

Procedure:

Public and commercial electronic data bases were searched, including the U.S. Government Printing Office, National Technical Information Service, Psychological Abstracts, Sociological Abstracts, Mental Measurements Yearbook, Educational Resources Information Center, and Defense Technical Information Center. Staff of the U.S. Army Soldier Support Center, Defense Manpower Data Center, Walter Reed Army Institute of Research, U.S. Navy Personnel Systems Research Department, U.S. Air Force Military Personnel Center, and the Canadian Forces Personnel Applied Research Unit were contacted for social climate instruments and documentation.

Findings:

Over 175 citations were obtained, including books, journal articles, technical reports, and survey instruments. All were reviewed for inclusion in the report, using criteria of reliability, validity, generalizability, availability, recency, and adequacy of documentation. The report includes a summary description, document citation, and items from each social climate measure judged adequate, as well as a review of social climate constructs and a discussion of measurement principles and criteria for selecting and developing questionnaires.

Utilization of Findings:

This report is intended for military researchers and practitioners. Information on the constructs underlying social climate, and on the available methods of measuring climate, will aid in developing a model of the climate of the U.S. Army, and in constructing questionnaires for use with Army personnel. Readers wishing more extensive and detailed information on social climate constructs and measures may consult the full research report, which contains all of the measures located and fuller discussions of the literature and psychometric principles.

HANDBOOK OF SOCIAL CLIMATE INDICATORS FOR THE U.S. ARMY

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HANDBOOK OF SOCIAL CLIMATE INDICATORS FOR THE U.S. ARMY

Introduction

This catalog of instruments is intended for both researchers and practitioners. Researchers are likely to use the catalog to refer to measurement instruments and items and their measurement properties with the aim of comparing the instruments or developing new measures. Practitioners include all personnel who choose or administer one or more of these measures to obtain information relevant to a management or policy question, issue or concern. These two types of readers are not mutually exclusive; that is, practitioners may be researchers and vice versa. The authors have endeavored to provide a level of detail that will be optimally informative for both types of reader.

Social climate research extends over fifty years. The research stems from the idea that groups vary in their overall culture or ambience in ways that can be systematically described, measured and predicted.

This report attempts to provide useful information relevant to the questions:

1. What measurement instruments exist for the assessment of social climate indicators in the U.S. Army?
2. What are the psychometric properties, in terms of reliability and validity, of those measurement instruments of social climate indicators?
3. To what extent are normative data available from U.S. Army and civilian applications of social climate measures?
4. Which constructs of social climate that have salience for the Army are without psychometrically tested measures?
5. How should prospective research proceed for the development, psychometric testing, and normative administration of measurements of social climate in the Army?

The measures described and reproduced in the following pages were selected from over 175 citations of instruments, scales and items. This catalog presents social climate indicators specifically developed for or employed in the U.S. Army. These measures were reviewed with regard to the research criteria described below. Table 1 displays the results of this review.

Table 1. Attributes of Social Climate Indicators

Author(s)	Measure name or description	Date	Methods	Scales	Reliability	Validity	Respondents	Sampling Plan	Sample	Generalizable
Allen, J. P., & Bell, D. B.	Military satisfaction and attrition	1980	Y	Y	N	Y	Y	Y	Y	Y
Allen, J. P., & Hazer, J. T.	Field-oriented measure of soldier morale.	1981	Y	Y	Y	?	?	?	?	?
Bauer, R. G., Stout, R., & Holz, R. F.	Measures of Military Attitudes.	1977	Y	Y	Y	?	Y	?	?	Y
Gal, R., & Manning, F. J.	Morale and its components.	1987	Y	Y	N	Y	N	N	N	N
Lockhart, D. C., Wagner, M., & Cheng, C.	Career Satisfaction Survey	1987	Y	Y	N	Y	Y	Y	Y	Y
Kimmel, M. J., & O'Hara, F. E.	The measurement of morale.	1981	Y	Y	N	N	Y	Y	Y	Y
Kirkland, F. R., Raney, J. L., & Hicks, J. M.	Reenlistment intentions in the U.S. Army Reserve.	1984	Y	Y	N	N	Y	Y	Y	Y
Meel, F. A.	Leadership, Motivation, and Cohesion	1989	N	Y	N	N	N	N	N	N
Siebold, G. L., & Kelly, D. R.	Combat Platoon Cohesion Questionnaire.	1988	Y	Y	Y	N	Y	?	?	Y
Smith, A. L.	Determinants of reenlistment	1988	Y	Y	Y	?	Y	Y	Y	Y
Sterling, B., & Allen, J.	Organizational attitudes, work environment, and satisfaction.	1983	Y	Y	N	N	Y	Y	Y	Y
Whitmarsh, P. J.	Job satisfaction during REALTRAIN training.	1983	Y	Y	N	N	N	N	N	N
Yost, E. E., & Tremble, T. R.	Cohesion	1985	Y	Y	N	N	Y	Y	Y	Y

Note: See Key on page 4

Table 1 Continued

Author(s)	Measure name or description	Date	Norms	Replicated	Current	Documentation	Public Domain	DTIC	Reproduced
Allen, J. P., & Bell, D. B.	Military satisfaction and attrition	1980	Y	N	N	Y	Y	Y	Y
Allen, J. P., & Hazer, J. T.	Field-oriented measure of soldier morale.	1981	Y	?	Y	N	Y	Y	Y
Bauer, R. G., Stout, R., & Holz, R. F.	Measures of Military Attitudes.	1977	?	?	N	Y	Y	Y	Y
Gal, R., & Manning, F. J.	Morale and its components	1987	N	Y	Y	Y	Y	Y	Y
Lockhart, D. C., Wagner, M., & Cheng, C.	Career Satisfaction Survey:	1987	Y	N	N	Y	Y	Y	Y
Kimmel, M. J., & O'Hara, F. E.	The measurement of morale.	1981	Y	Y	N	Y	Y	Y	Y
Kirkland, F. R., Raney, J. L., & Hicks, J. M.	Reenlistment in the U.S. Army Reserve.	1984	N	N	N	Y	Y	Y	Y
Meel, F. A.	Leadership, Motivation, and Cohesion	1989	N	N	N	N	Y	Y	Y
Siebold, G. L., & Kelly, D. R.	Combat Platoon Cohesion Questionnaire.	1988	Y	Y	Y	Y	Y	Y	N
Smith, A. L.	Determinants of reenlistment	1988	Y	N	Y	Y	Y	Y	Y
Sterling, B., & Allen, J.	Organizational attitudes, work environment, and satisfaction.	1983	N	N	N	Y	Y	Y	Y
Whitmarsh, P. J.	Job satisfaction during REALTRAIN training.	1983	N	N	Y	Y	Y	Y	Y
Yost, E. E., & Tremble, T. R.	Cohesion	1985	N	N	Y	Y	Y	Y	Y

Note: See Key on page 4

Key to Criteria for Table 1:

1. The measure was developed using appropriate research methods.
2. Multiple-item scales were developed rather than single items.
3. Reliability was assessed and reported.
4. The measure's validity (predictive, content or construct validity) was assessed and reported.
5. The number of respondents was large enough to satisfy minimum levels of generalizability.
6. The respondents were selected using an unbiased sampling plan.
7. The sample of respondents was drawn in a methodologically sound manner.
8. The sample of respondents was generalizable to the Army population or subpopulation which it was intended to reflect.
9. Some type of normative information (e.g., mean scores and standard deviations) was reported for each instrument or scale.
10. The measure was employed in two or more different investigations or with multiple respondent samples.
11. The measure was relatively current; i.e., it was developed or used within the past fifteen years -- preferably within the past ten years.
12. Supporting documentation for the instrument is adequate.
13. The measure was not protected by U.S. copyright laws.
14. The document describing the measure was available through DTIC.
15. The measure was reproduced in the document or an appendix.

In the body of the text below, the measures are arranged alphabetically by the last name of the first author of the document in which they are described. Because many of the instruments include several scales measuring different constructs, the citations are not arranged by function. A summary page precedes each social climate measure. The summary includes a document citation, brief description of the document, sample of respondents, and the psychometric properties of the measure described in the document. Items from the social climate measures have been reproduced without modification, whenever possible. In the interest of brevity, some response scales have been summarized and others have been changed in format.

The intended audiences for this report consist of military researchers and practitioners. While these groups have many interests in common, they may differ greatly with respect to their familiarity with the language and methods of psychological measurement. Further, practitioners may have greater interest in the policy-relevant aspects of this report than researchers. To meet the needs of these disparate audiences, the report incorporates an extensive quantity of material designed to make it both comprehensive and useful, including a review of social climate constructs and a discussion of measurement theory principles. The latter section is aimed at practitioners who wish to become acquainted with important considerations in the construction of measures of social climate.

Social Climate Constructs

Social climate is a comprehensive term which has been used to characterize organizational culture or ambience (Schneider, 1985). The term typically refers to interpersonal practices and policies; additionally, it has been used to refer to attitudes or perceptions held by individuals within the groups. Schneider asserts that "although there are certainly conceptual and methodological advances still to be made in climate research...it now seems clear that multiple dimensions of policies and activities relevant to a particular issue (interpersonal relationships, service) can be assessed reliably and validly" (p.595).

This report is concerned with those dimensions of social climate relevant to the U.S. Army. As is clear from the above paragraph, social climate is a comprehensive term rather than a precise one; the term has been used to refer to any or all of several social climate factors or dimensions. Many of these are general dimensions relevant to most social environments; some are specific to the military. This report focuses on those concepts most pertinent to the dimensions called: 1. morale, 2. satisfaction and motivation, 3. cohesion or bonding, and 4. esprit de corps. These concepts are briefly described below using the terminology introduced by Ingraham and others at Walter Reed Army Research Institute (Ingraham and Manning, 1981).

Ingraham and others at WRAIR have distinguished between social climate dimensions corresponding to social phenomena occurring at different organizational levels. At the level of the individual, "Morale" or "Individual morale" refers to the individual's sense of well-being based on confidence in the self and in primary groups. "Cohesion" is the term used to refer to the affective characteristics of a small or primary group rather than the individual. Cohesion refers to feelings of belonging, affection and trust, and solidarity. "Horizontal cohesion" refers to the strength of the affective bonds among individuals of the same rank or corps (for instance, among enlisted personnel or officers), whereas "vertical cohesion" refers to affective bonds between ranks (for instance, between enlisted personnel and officers). "Esprit de corps" is the term used to refer to the strength of affect among large collectives of individuals or groups. High esprit de corps is characterized by pride in membership in the larger group or collective, especially by unity of purpose and devotion to the higher cause. Thus, morale, cohesion and esprit refer to different levels of analysis, and different sets of variables.

Social climate constructs have also been introduced from the study of businesses. The "work environment" (Dalziel, Klemp, Cullen, Duffy, & Nogami, 1980; Olson & Borman, 1987) refers to the perceived and actual characteristics of the work situation, including its physical, behavioral and attitudinal aspects. The term "job satisfaction" is used to refer to feelings of positive or negative affect that a person has about different aspects of his job. "Satisfaction" in general may be measured with regard to any variety of objects. "Motivation" describes the direction, vigor or persistence of behavior.

Borman, Johnson, Motowidlo, and Dunnette (1975) show the ambiguity with which these terms have been used; they note that objective indicators of morale have included rates of desertion, AWOLs, requests for transfers, records of disciplinary actions, degree of cheerfulness, hospital reports of illnesses and absences, general smartness of appearance, and performance in jobs, marches, battles, and athletic contests.

Measurement Theory Principles

Accurate measurement of social climate is unlikely unless the variables of interest are specified or defined with precision. This section of the report describes principles of measurement theory which are particularly relevant to the development and interpretation of social climate indicators for the U.S. Army.

Measurement consists of rules for assigning numbers to objects in such a way as to represent quantities of attributes. The role of measurement procedures is to provide accurate information that can be used to make informed and appropriate decisions. To ensure this, measurements must be systematic and objective.

Essential Steps in Measurement

In any field, measurement always involves three common steps: (1) identifying and defining the quality or attribute that is to be measured, (2) determining a set of operations by which the quality may be observed, and (3) establishing a set of procedures or definitions for translating these observations into quantitative statements of degree or amount.

Each measure should be concerned with a single distinct, unitary attribute. When unitary attributes are combined to form an overall appraisal (for example, of social climate), they should be combined within one measure using an explicit set of rules and procedures.

Qualities Desired in any Measurement Procedure

There are three major considerations related to the evaluation of measurement instruments--validity, reliability, and practicality. Validity refers to the degree to which a measure provides information that is relevant to the decision that is to be made. A judgment of validity is always made in relation to a specific decision or use. Reliability has to do with the accuracy and precision of a measurement procedure. Indices of reliability give an indication of the extent to which a particular measurement is consistent and reproducible. Practicality is concerned with a wide range of factors of economy, convenience, and interpretability that determine whether a measure is practical for widespread use.

Validity

Validity is the primary concern with regard to any measurement procedure. An instrument must measure what we want it to measure, all of what we want it to measure, and nothing but what we want it to measure.

The validity of a measurement may not be assumed; it must be established on the basis of adequate evidence. The extent to which performance on the measure actually corresponds to the behavior of interest must be established. Typically, one or more of three validation strategies may be used.

Predictive validity. Does the measure have a significant statistical relationship with another meaningful variable (the criterion variable)? Predictive validity is determined by the degree of correspondence between the two measures involved. If the correlation is high, no other standards are necessary. Criterion-related validity is most important for a measure that is to be used to predict outcomes that are represented by clear-cut criterion measures. The main problem in assessing evidence of criterion-related validity for prediction is related to the limitations of the available criterion measures.

Content validity. Does the measure represent desired content? In practice, content validity rests mainly on the "face validity" of the measure with regard to two questions: (1) Does the measure seem to include important content and exclude irrelevant items?; and (2) Does the measure seem to be appropriately designed?

To ensure content validity, it is necessary to obtain a broad collection of items which best represent that which is being measured. To the extent this sample of items is representative of the domain of all possible items, one can generalize from the specific contents to the wider domain of all possible items. As Nunnally (1978) points out, statistical analyses may provide circumstantial evidence for judging content validity, but claims concerning content validity primarily are judged by the apparent propriety of the items and the way they are presented.

Construct validity. Does the measure relate to a concept or theory in an expected manner? Constructs are statements concerning the causal and empirical relations among variables. Construct validation requires that (1) the construct is well defined in terms of a variety of observable variables, (2) there are one or more observable variables with content validity, and (3) the construct is strongly related to other constructs of interest. Strong support for construct validity is justified if the measures of the construct behave as expected.

Reliability

The second major question raised with respect to a measurement procedure is: How reliable is it? Validity is concerned with what a measurement procedure measures, but reliability is concerned with the accuracy of measurement, not meaning. Reliability concerns the precision of a score and the degree to which it can accurately be reproduced upon re-administration of the measure. Therefore, reliability concerns the extent to which measurements are repeatable when different persons make the measurements, on different occasions, with supposedly alternative instruments for measuring the same thing and when there are small variations in circumstances for making measurements that are not intended to influence results.

Measurements are intended to be stable over a variety of conditions in which essentially the same results should be obtained. A measure is said to be reliable to the extent that an individual remains nearly the same in repeated measurements, as indicated by either a low standard error of measurement or by a high reliability coefficient.

Coefficient alpha (Cronbach, 1951), which is derived from the average correlation among items, is the basic formula for determining reliability based on internal consistency of items. It is appropriate for any type of measure, and should be obtained for every scale or instrument, even if other estimates of reliability are employed (Nunnally, 1978). The version of the formula known as

KR-20 should be used to calculate the reliability of measures with dichotomous items. Reliability can also be estimated by subdividing a test in various ways. A frequently-used method is the split-half approach, which divides the items within a measure into two halves. The scores on the two half-tests are then correlated to assess the measure's reliability.

Alternative forms of a measure can be constructed to estimate measurement error due to variations in test content. In this approach, two versions of a measure are developed and administered to the same individuals on two measurement occasions, usually about two weeks apart. Not only will differences in content between the alternate forms affect reliability, but variations in people over the time between testings will also contribute to measurement error. Test-retest reliability is an approach to estimating measurement error due to intra-individual differences in responding. In this approach a measure is repeatedly administered to the same individuals over a brief period of time. However, exposure to the measure during the first administration may influence responses on the second measurement occasion. Nunnally (1978) does not recommend the use of the retest method to estimate reliability in most circumstances.

Multiple item measures and scales. There are a number of important reasons for requiring more than one item in nearly all measures of attitudes. First, a single item may measure only a limited part of the construct. Second, each item may relate (to some degree) to constructs other than that being measured, in part because each item tends to have some generality as well as specificity. Further, it is often desirable to make fine differentiations among people, and this can seldom be done with a one-item measure. Multiple items can be combined to make very fine distinctions among respondents. Reliability tends to increase (measurement error is reduced) as the number of items in a combination increases.

How high must the reliability of a measurement be? There is no fixed number that answers this question, since the appraisal of any new procedure must always be in terms of other procedures with which it is in competition. In basic research, a reliability of .80 for the different measures involved is considered adequate.

Norms

Norms are any scores that provide a frame of reference for interpreting the scores of individuals. National, regional or local norms can be derived and compared.

There are several ways to calculate and express norms. Grade or age norms are developed by matching the individual to a group whose performance he equals. Percentile norms describe the individual's score in terms of the percentage of group surpassed by the individual. Standard score norms describe the individual's responses in terms of the number of standard deviation units above

or below the group average. Norms usually are expressed both in the form of standard scores and as percentiles.

Profiles

There is no direct way of comparing a score on different scales, unless both scores are expressed in terms of the percentage of some defined common group that gets scores below that point. The set of different measure scores for an individual, expressed in a common unit of measure, constitutes his score profile.

Profiles must be interpreted with caution. First, the scores must be based upon equivalent groups for all the measures. The best guarantee of equivalence is a common sample used for norming all the measures. A second problem is that of deciding whether the ups and downs in a profile are meaningful, either statistically or practically, because no measure score is completely exact.

Procedural Advice Concerning Social Climate Measurements

1. The focus or referent for responses should be specific and defined rather than general and ambiguous.
2. Judgments should be free from biases of social desirability or motivation to fake or distort responses.
3. The measure should allow assessment of a reliability estimate.
4. Surveys should contain simple, clear, unambiguous items, written at a reading level appropriate to the target population, and which encourage respondent interest.
5. The inclusion of administration instructions appears to be critical in gaining instrument acceptance.
6. The strain on administrator's resources and facilities should be minimized.
7. Optical scoring is most efficient.
8. The instrument should be designed with computer programs for instrument analysis in mind.
9. One month is considered the outside limit in survey guided development interventions. If more time elapses the data become stale.
10. Feedback format should be simple, visually impactful, present a comparison between an actual and desired condition, and indicate specific directions for change.
11. Feedback recipients must feel the information they receive about themselves, their subordinates, or their organization is real, believable and of some importance to them.

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APPENDIX A

SOCIAL CLIMATE MEASURES USED IN THE U.S. ARMY

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Allen, J. P., & Bell, D. B. (1980). Correlates of military satisfaction and attrition among Army personnel. (ARI Technical Report 478). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A109 456)

Description:

This study examined relationships between Army organizational variables and levels of soldier satisfaction. The study was based on a secondary analysis of the 1978 Army Life study.

Sample:

Subjects from 8,140 personnel assigned to 60 different battalions.

Measure:

Satisfaction was measured by a three-item scale.

Organizational climate was measured by four factor-analytically based dimensions of climate factors:

1. communications skill, which deals with the adequacy of openness of the information in the unit,
2. motivation; which measures the degree to which the individual has a sense of accomplishment in his work,
3. unit standards; which estimates the degree to which the person perceive the unit as emphasizing high standards, and
4. dedication scale, which consists of a single item -- "I'd rather contribute my best effort to the unit's mission and my assigned tasks".

Scale means and standard deviations.

	<u>Mean</u>	<u>SD</u>
<u>Job</u>		
Satisfaction	2.71	1.43
Fair deal in army	2.83	1.40
Satisfied with the army	2.64	1.30
<u>Climate</u>		
Motivation	2.63	1.04
Communication	2.70	.92
Vacation	3.96	1.18
Unit standards	3.39	.84

Criterion variables included the following, taken from administrative information:

1. percentage of "satisfactory" ratings on the Army Training and Evaluation Program reflecting combat readiness;
2. unit readiness reports dealing with overall personnel, equipment serviceability and training readiness;
3. percent of satisfactories on the annual General Inspection;
4. rate of expeditious discharge;
5. rates of criminal actions including court-martial, absence-without-leave, desertion, Article 15, violent crime, crime against property, and hard drugs/marijuana conviction;

6. ratings of effectiveness of battalions made on a 13 point scale by the Commanding General, the Assistant Division Commander and the Brigade Commander.

Independent raters' judgements were combined into a single score.

Allen, J. P., & Bell, D. B. (1980). Correlates of military satisfaction and attrition among Army personnel. (ARI Technical Report 478). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A109 456)

Satisfaction scale.

1. All in all, I am satisfied with my job.
2. In general, I feel that I have gotten a fair deal from the Army.
3. All in all, I am satisfied with the Army.

Organizational climate scales.

Communication scale.

1. Decisions are made in this unit at those levels where the most adequate information is available.
2. Workload and time factors are taken into consideration in planning our work group assignments.
3. Decisions are made in this unit after getting information from those who will actually do the job.
4. Meetings in this unit generally accomplish meaningful objectives.
5. My unit is willing to try new or improved methods of doing work.
6. Information I receive down through formal channels is generally accurate.
7. I get all the information I need about what is going on in other sections or departments in my unit.
8. This unit has a real interest in the welfare of assigned personnel.

Motivation scale.

1. I get a sense of accomplishment from the work I do.
2. I look forward to coming to work everyday.
3. My job helps me achieve my personal goals.
4. I would like to stay in this unit as long as I can.

Unit standards scale.

1. Rules in this unit are enforced.
2. There is enough emphasis on competition in this unit.
3. This unit places a high emphasis on accomplishing the mission.
4. My unit is respected on this post.

In most cases survey responses involved five point Likert-type scales.

Allen, J. P., & Hazer, J. T. (1981). Development of a field-oriented measure of soldier morale. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A128 381).

Description:

This research used items from an earlier project by Borman and Bleda. Reanalysis of the Borman and Bleda data resulted in reducing the number of items on morale scales to 64 questions assessing 6 factors.

Measure:

The instrument used by Borman and Bleda requires the use of a 64 item questionnaire, a single page scoring template, a table of norms, and a brief description of the six dimensions. It is estimated that subjects can complete the survey in 10-15 minutes and that administrators would need no more than 2 minutes to hand score profiles.

The items are dichotomously scored. Internal consistencies for five of the scales range from .83 to .91, with the exception of the motivation scale, $\alpha=.56$.

Alpha reliabilities are reported for the following scales-- motivation, $\alpha=.56$; Army satisfaction, $\alpha=.88$; work satisfaction, $\alpha=.89$; satisfaction of supervisor, $\alpha=.89$; satisfaction of co-workers, $\alpha=.91$; and satisfaction with pay, $\alpha=.83$.

Norms are presented in terms of percent in response categories rather than mean scores.

Allen, J. P., & Hazer, J. T. (1981). Development of a field-oriented measure of soldier morale. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A128 381).

Motivation scale:

1. amounts of effort in work
2. involved in job
3. time seems to drag
4. do "extra" work
5. work harder than peers.

Army satisfaction scale:

1. opportunities for worthwhile work,
2. opportunities for interesting work
3. Army policies and practices
4. amount of personal freedom
5. opportunities for using abilities
6. amount of recognition for good work
7. opportunities for training
8. opportunities for planning life
9. immediate supervisors
10. working conditions
11. Army attitude in civilian life
12. Army versus other organizations
13. happy now versus before joining.

Work satisfaction scale:

1. real enjoyment in work
2. all in all, job satisfaction
3. interest in job
4. feeling of pride from work
5. satisfying work
6. things enjoyed on job
7. good work
8. sense of accomplishment at work
9. boring work
10. accomplish something worthwhile
11. job usually interesting
12. challenging work.

Satisfaction with supervisor scale:

1. satisfaction with supervisor
2. all in all, supervisor satisfaction
3. supervisor's good versus bad traits
4. annoying supervisor
5. intelligent supervisor
6. bad supervisor
7. supervisor around when needed
8. impolite supervisor
9. supervisor praises good work
10. supervisor knows job well
11. hard to please supervisor
12. stubborn supervisor

13. up-to-date supervisor
14. lazy supervisor
15. supervisor encourages extra effort.

Co-workers satisfaction scale:

1. stupid co-workers
2. unpleasant co-workers
3. lazy co-workers
4. intelligent co-workers
5. slow co-workers
6. responsible co-workers
7. active co-workers
8. easy to make co-worker enemies
9. boring co-workers
10. loyal co-workers
11. smart co-workers
12. co-workers talk too much
13. co-workers have now interests
14. hard-to-meet co-workers
15. fast co-workers
16. all in all, work group's satisfaction.

Satisfaction with pay scale:

1. bad pay
2. underpaid
3. adequate income for normal expenses
4. barely live on income
5. pay satisfaction considering skills and effort
6. pay is less than I deserve
7. insecure pay
8. satisfactory benefits.

Bauer, R. G., Stout, R., & Holz, R. F. (April 1977). Measures of Military Attitudes. (Research Problem Review 77-1). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Description:

A series of attitude scales were developed that could be used to measure the perceptions and attitudes of Army Enlisted Personnel on a broad range of organizational issues. Thirteen attitude scales were developed, consisting of eighteen scales and subscales grouped into three broad categories:

1. military environment,
2. personality and
3. civilian background.

The scales measure soldier's perceptions of issues such as unit performance, leadership, esprit de corps, unit conduct, racial discrimination conduct, and satisfaction with work.

Sample:

1,564 U.S. Army enlisted men and NCOs surveyed during 1973-4 from around Army commands in CONUS, Alaska and West Germany. Within each command, respondents were selected from military units apparently representative of the U.S Army.

Measure:

<u>Subscale Name</u>	<u>Reliability</u>
Unit discipline scales I,	.817*
Unit discipline scales II,	.704*
Unit discipline scales III	.802*
Leadership scale I	.922*
Leadership scale II	.712*
Military work roles scale	.90 *
Esprit de corps scale	.731*
Unit Racial discrimination	.63
General racial discrimination	.63
Acceptance of authority	.727
Recreational availability and interest	.899
Status concern scale	.598
Social responsibility scale	.558
Civilian job relations scale	.852
Civilian school relations	.699
Socio-economic status index	.766
Family relations scale	.890

* Scale reproduced in handbook.

Bauer, R. G., Stout, R., & Holz, R. F. (April 1977). Measures of Military Attitudes. (Research Problem Review 77-1). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Discipline I Scale

1. To what extent do members of your unit process paperwork in an efficient manner?
2. To what extent do members of your unit cooperate with each other?
3. To what extent do members of our unit work together as a team?
4. To what extent do members of your unit maintain a high level of combat readiness?
5. To what extent do members of your unit do whatever needs to be done?
6. To what extent do members of your unit help each other out?

Discipline II Scale

1. To what extent do members of your unit maintain and properly wear their uniforms?
2. To what extent do members of your unit keep living and working areas in clean and orderly condition?
3. To what extent do members of your unit maintain a neat personal appearance?

Discipline III Scale

1. To what extent do members of your unit "get over" on their supervisors?
2. To what extent do members of your unit fail to show up on time?
3. To what extent do members of your unit need direct supervision to get the job done right?
4. To what extent do members of your unit display disorderly conduct off-post?
5. To what extent do members of your unit sit around on duty hours doing nothing?
6. To what extent do members of your unit do poor quality work?
7. To what extent do members of your unit do just enough work to get by?

Leadership I Scale

1. To what extent is your supervisor concerned about the personal problems of his subordinates?
2. To what extent is your supervisor technically competent to perform his duties?
3. To what extent does your supervisor keep his subordinates informed?
4. To what extent does your supervisor plan ahead?
5. To what extent does your supervisor keep himself informed about the work that is being done by his subordinates?
6. To what extent does your supervisor communicate effectively with his subordinates?

7. To what extent does your supervisor anticipate and solve problems before they get out of hand?
8. To what extent is your supervisor willing to make changes in ways of doing things?
9. To what extent does your supervisor encourage subordinates to work together as a team?
10. To what extent does your supervisor keep himself informed about the progress his subordinates are making in their work?
11. To what extent does your supervisor work right along with his men?
12. To what extent does your supervisor offer new ideas for solving job-related problems?
13. To what extent does your supervisor know and treat his subordinates as individuals?
14. To what extent does your supervisor make decisions quickly and stick to them?

Leadership II Scale

1. To what extent does your supervisor lack sufficient experience to perform his duties?
2. To what extent does your supervisor fail to provide for the everyday needs of his subordinates?
3. To what extent does your supervisor fail to keep his subordinates busy with challenging tasks?
4. To what extent is your supervisor unwilling to accept responsibility for mistakes made by his subordinates?
5. To what extent does your supervisor depend too much on threats - rather than rewards - to get things done?
6. To what extent is your supervisor not aware of his subordinates' capabilities?
7. To what extent does your supervisor fail to explain why a particular action is important?

Military Work Role Scale

1. To what extent do you enjoy performing the actual day-to-day activities that make up your job?
2. To what extent are there things about working here (people, policies, conditions) that encourage you to work hard?
3. To what extent do you gain a sense of accomplishment from the day-to-day activities that make up your job?
4. To what extent do you feel the training you have received has improved your ability to perform your job?
5. To what extent do you feel that the people you work with are a team that works together?
6. To what extent does your MOS (Military Occupational Specialty) match your interests, knowledge, and skills?
7. In your opinion, how important is the mission assigned to this command?
8. How important is the job you are doing in the Army?
9. How interested are you in the job your are doing in the Army?
10. How often are you assigned meaningless tasks?
11. All in all, how satisfied are you with your job?

12. Which of the following statements best describes your feelings about a career in the Army?
13. Do you think you will pursue a career in the Army?

Esprit de Corps Scale

1. Men in my unit know how to get the job done right
2. If a man needs help in mu unit, he can count on others to provide it
3. Members of my unit are a good bunch to work with
4. I don't care very much for the guys I work with
5. I don't trust the others in my unit

Gal, R., & Manning, F. J. (1987). Morale and its components: A cross-national comparison. Journal of Applied Social Psychology, 17, 369-391.

Description:

An examination of responses of U.S. soldiers who were administered an English version of a questionnaire widely used in the Israeli Defense Forces to assess morale, cohesion, and soldier perception of unit readiness for combat.

Sample:

Two U.S. Army armored cavalry squadrons (total N=660), one stationed on the East German border (N=274) and one in the continental U.S. (N=386). Comparable sample of soldiers in the Israeli Defense Forces (N=1270) stationed on the Lebanon border.

Measure:

The Combat Readiness Morale Questionnaire is one of the most frequently used questionnaires in the IDF. There are 31 items; answers are on 5-point Likert scales. Factor analyses showed that all three data sets were organized around a group factor (Unit morale, cohesion), a leadership factor (Confidence in Senior Commanders), and two individual factors, one personal (Worries) and one professional (Soldiery /Competence).

Gal, R., & Manning, F. J. (1987). Morale and its components: A cross-national comparison. Journal of Applied Social Psychology, 17, 369-391.

Combat Readiness Morale Questionnaire

1. What is the level of morale in your company?
2. How would you describe your company's readiness for combat?
3. How would you describe the condition of your unit's major weapon system (Tanks, APC's, etc.)? What kind of shape are they in?
4. How would you describe your friends' readiness to fight, if and when it is necessary?
5. In the event of combat-how would you describe your confidence in your platoon leader?
6. In the event of combat-how would you describe your confidence in your troop* commander?
7. In the event of combat-how would you describe your confidence in your crew/squad members?
8. In the event of combat-how would you describe your confidence in yourself?
9. In your opinion, what is the probability that your unit will be in combat during the next year?
10. How would you describe your confidence in the tactical decisions of your Squadron** Commander?
11. How would you describe your confidence in the tactical decisions of your Brigade Commander?
12. (no comparable item in the American questionnaire)
13. How would you describe your confidence in the tactical decisions of your Corps Commander?
14. How would you describe your confidence in the tactical decisions of the Army General Staff?
15. How familiar are you with the General Defense Plan (GDP) of your unit (in regard to terrain)?
16. How familiar are you with the General Defense Plan (GDP) of your unit (in regard to location of friendly forces)?
17. How familiar are you with the General Defense Plan (GDP) of your unit (in regard to location of enemy forces)?
18. How familiar are you with the General Defense Plan (GDP) of your unit (in regard to expected missions)?
19. How much of the time does your unit spend on useful training?
20. How much confidence do you have in ;your unit's major weapon system (tanks, APC's, etc.)?
21. How would you rate your own skills and abilities as a soldier (using your weapons, operating and maintaining your equipment, etc.)?
22. In general, how would you rate yourself as a soldier?
23. In general, how would you rate the Warsaw-Pact soldiers?
24. How would you describe your unit togetherness in terms of the relationships among its members?
25. How would you describe the relationships between the officers and the men in your unit?
26. To what extent do you worry about what might happen to you personally, if and when your unit goes into combat?

27. How often do the soldiers talk to each other about these worries?
28. How often do your leaders talk to their troops about possible wartime issues?
29. How much stress do you typically undergo because of separation from family/wife/girlfriend due to field training?
30. How much of a contribution do you feel you are making to the security of the United States by serving in the Army?
31. What is the level of your personal morale?

All items measured on 5-point Likert type scales.

*Troop- company-size unit. **Squadron- battalion-size unit.

Kimmel, M. J., & O'Mara, F. E. (1981). The measurement of morale. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-P001 340).

Description:

This research was intended to construct and validate an organizational morale measure from aggregated unit members' satisfaction responses.

Sample:

The morale measure was administered at three different points in time to a sample of 55 battalions at six CONUS installations. The total sample consisted of 5,844, 6,182, and 6,875 individuals for waves 1, 2 and 3 respectively.

Measure:

The morale score for each battalion was generated by first averaging the battalion members' responses to the satisfaction items into a general satisfaction score for each individual and then averaging the general satisfaction scores for all battalion members.

The survey contained two sets of items. One set of items was composed of four items drawn from the Survey of Organizations and which measured individual satisfaction toward four organizational domains:

1. unit climate,
2. supervisors,
3. co-workers, and
4. job.

The second set of items contained 69 items which measured organizational climate on the four domains listed above.

The unit climate domain includes such areas as unit effectiveness, quality of communications, organizational standards and the orderliness and purposefulness of unit activities.

The supervisor domain measures various facets of leadership behavior including supervisory consideration, initiation of structure and leader planning ability.

The co-worker domain assesses levels of cohesion and motivation among unit members.

The job domain assesses various characteristics of unit members' jobs such as job pressure, job enrichment and levels of job responsibility.

Means and standard deviations for the scales broken down by grade levels (EM, NCO, Officers) are found in Appendix B of the report.

Kimmel, M. J., & O'Mara, F. E. (1981). The measurement of morale. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-P001 340).

Satisfaction climate

1. All in all, I am satisfied with the unit I am in.
2. All in all, I am satisfied with my supervisor.
3. All in all, I am satisfied with the persons in my work group.
4. All in all, I am satisfied with my job.

Climate items

Unit domain:

1. In my unit it is hard to get the equipment and tools I need to do my job.
2. My unit gets told about important event later than other units.
3. Scheduled events like training and inspections are canceled at the last minute.
4. The officers in my unit care about what happens to the individual soldier in my unit.
5. Excessive drinking is not a problem in my unit.
6. My unit does not have a drug problem.
7. Decisions are made in this unit after getting information from those who actually do the job.
8. My unit is respected on this post.
9. Meetings in this unit generally accomplish meaningful objectives.
10. Decisions are made in this unit at those levels where the most adequate information is available.
11. My unit is willing to try new or improved methods of doing work.
12. There is discrimination against minorities in this unit.
13. Rules in this unit are enforced.
14. There is discrimination against whites in this unit.
15. This unit places a high emphasis on accomplishing the mission.
16. The information I receive down through the chain of command is generally accurate.
17. I feel safe in my unit area.
18. What is your evaluation of the overall work effectiveness of your company/troop/battery (not effective to extremely effective).
19. Compared to all other units that you have ever served in how effective is your company/troop/battery (least effective to most effective).
20. How many improvements would it take to make this unit the most effective company/troop/battery that you have ever served in (many improvements to no improvements).

Supervisor domain:

1. My supervisor is willing to listen to my problems.
2. My supervisor encourages people to give their best efforts.

3. My supervisor gives me instructions that conflicts with other information I get.
4. My supervisor makes us work a lot of unnecessary overtime.
5. When I am talking to my supervisor he doesn't pay attention to what I am saying.
6. My supervisor lets other supervisors interfere with my work group.
7. My supervisor puts suggestions by the members of the unit into operation.
8. My supervisor decides what shall be done and how it shall be done.
9. My supervisor makes sure his role in the company is understood by the men.
10. My supervisor gives us big jobs late in the day and wants them done before we leave work.
11. My supervisor insists that individuals follow standard operating procedures.
12. My supervisor lets individuals know what is expected of them.
13. My supervisor acts without consulting the men in the unit.
14. My supervisor refuses to explain his actions.
15. My supervisor treats the people who work for him fairly.
16. My supervisor tries to do his best.

Co-worker domain:

1. The soldiers in my unit let you know when they think you have done a good job.
2. Soldiers in my unit try to think of better ways of getting the job done.
3. Soldiers in my unit criticize guys who are goofing off.
4. Soldiers in my unit get along with each other.
5. The senior NCO's in my unit look out for the welfare of the individual soldier in my unit.
6. The members of my work group try to do their best.

Job domain:

1. My job gives me the chance to learn skills that are useful outside the Army.
2. In my job I can tell how well I am doing without other people telling me.
3. I know what I will be doing from day to day.
4. My job requires high level technical skills.
5. In my job I have more work to do than one person can handle.
6. My job lets me use my skills in training.
7. In my job I have to work extra hours.
8. My job lets me do the things I am good at.
9. My job keeps me too busy to take extra training programs.
10. My job gives me the feeling that I have done something important.
11. The pressures of my job spill over into my off-duty life.
12. I can see what my job has to do with others in my unit.
13. I have full responsibility for doing certain parts of my job.
14. My job leaves me feeling tired at the end of the day.

15. Army rules and regulations make it hard for me to do my job.
16. I get a sense of accomplishment from the work I do.
17. Workload and time factors are taken into consideration in planning our work group assignments.
18. I look forward to coming to work every day.
19. My job helps me to achieve my personal goals.
20. I want to contribute my best efforts to the unit's mission and my assigned tasks.
21. I have a good opportunity for advancement in this unit if I do a good job.
22. The job I have is a respected one.
23. I enjoy doing the type of work that my job requires.
24. I try to do my best.
25. How well do you know how to do your job.

Miscellaneous:

1. In general, I feel that I have gotten a fair deal from the Army.
2. My possessions are safe where I live.

Kirkland, F. R., Raney, J. L., & Hicks, J. M. (1984).
Reenlistment in the U.S. Army Reserve. (ARI Technical Report
641). Alexandria, VA: U.S. Army Research Institute for the
Behavioral and Social Sciences. (DTIC No. AD-A168 686)

Description:

Provides information for Army Personnel Managers concerning motivational and other factors which influence reenlistment intentions of U. S. Army Reservists in Troop Program Units.

Sample:

A mail survey was conducted in 1978 with the resulting representative sample of 892 reservists.

Measure:

Measured the reenlistment intentions and specific characteristics of the reservists, the reserve unit and the reserve experience.

Five factors accounted for 60% of the total variance using the 26 items most highly related to reenlistment intent. These factors are called:

1. job satisfaction,
2. prestige,
3. interference-facilitation,
4. social utility and
5. supervisor-subordinate relationships.

Kirkland, F. R., Raney, J. L., & Hicks, J. M. (1984).
Reenlistment in the U.S. Army Reserve. (ARI Technical Report
641). Alexandria, VA: U.S. Army Research Institute for the
Behavioral and Social Sciences. (DTIC No. AD-A168 686)

1. Being in the Army Reserve interferes seriously with my home life (3)
2. Being in the Army Reserve is a chance to do something important (4), (2)
3. Being in the Army Reserve helps me to better myself (4)
4. Being in the Army Reserve is fun (4)
5. My reserve duties interfere with my civilian job (3)
6. Being in the Army Reserve is an interesting change (4)
7. My reserve job is interesting (most of the time) (1)
8. My work in the Army Reserve is important (has meaning and purpose most of the time) (1)
9. Being in the Army Reserve gives me a feeling of belonging (4)
10. I am satisfied with my present reserve job (most of the time) (1)
11. My reserve work uses my training, skill, knowledge (most of the time) (1)
12. My spouse or girlfriend/boyfriend resents the time that I spend at reserve meetings (~)
13. Being in the reserves helps me in my civilian career (2)
14. Being a part of something important was important to me when I enlisted in the Army Reserve (2)
15. My parents are proud that I'm a Reservist (2)
16. My experiences in the Army Reserve have not lived up to my expectations (1)
17. Opportunity to see results of my work in the reserves is good (1)
18. Prestige of being a reservist was important to me when I enlisted in the Army Reserve (2)
19. My reserve work offers variety (chance to do different things) most of the time (1)
20. The recognition (credit given for work done) I receive is adequate (most of the time) (5)
21. Being in the Army Reserve is a chance to be with people I like (4)
22. A chance to learn something new and different was important to me when I enlisted in the Army Reserve (2)
23. My working association with my Reserve supervisor is generally good (5)
24. People don't reenlist in the Army Reserve because Reserve training is really dull (1, 3)
25. The new people coming into my unit are not the sort of people I want to associate with (3, 5)
26. The senior NCO in the unit looks out for the welfare of the soldiers most of the time (5)

Numbers in parentheses indicate the factor(s) on which the item loaded most strongly.

1-job satisfaction,

2-prestige,

3-social utility,

4-interference facilitation,

5-supervisor/subordinate relations.

Lockhart, D. C., Wagner, M., & Cheng, C. (1987). 1986 Early Career Satisfaction Survey: Analytic Report. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A194 326).

Description:

This survey collected data on soldier's attitudes and job satisfaction as part of a longitudinal analysis of 1st term soldiers.

Sample:

556 soldiers who were respondents to an earlier ARI survey responded to a mailed questionnaire.

Measure:

Job satisfaction factors were created by adding together the answers to specific questions previously reported by Hackman and Oldham, 1975 (which see).

Horizontal bonding was measured by 5 items with 5 Likert-type responses for each item. These questions ask subjects about their bonding among immediate team members.

Means and standard deviations for job satisfaction factors:

<u>Factor</u>	<u>Mean</u>	<u>S.D.</u>
pay	4.15	1.74
security	4.52	1.75
social	4.93	1.57
supervision	4.03	2.03
growth	4.07	1.94

Lockhart, D. C., Wagner, M., & Cheng, C. (1987). 1986 Early Career Satisfaction Survey: Analytic Report. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A194 326).

Items to measure general satisfaction were scored on a 7-point Likert scale, where 1-disagree strongly, 2-disagree, 3-disagree slightly, 4-neutral, 5-agree slightly, 6-agree, 7-agree strongly.

1. Generally speaking I am satisfied with this job (current duty assignment).
2. I frequently think of quitting this job (current duty assignment).
3. I am generally satisfied with the kind of work I do in this job (current duty assignment).
4. Most people on this job are very satisfied with the job (current duty assignment).
5. People on this job (current duty assignment) often think of quitting.

Job satisfaction factors:

Pay satisfaction factors included the following two items using a 7=point Likert scale from 1=extremely dissatisfied, 2=dissatisfied, 3=slightly dissatisfied, 4=neutral, 5=slightly satisfied, 6=satisfied, to 7=extremely satisfied.

1. The amount of pay and fringe benefits I receive.
2. The degree to which I am fairly paid for what I contribute to this organization.

Security satisfaction:

1. The amount of job security I have.
2. How secure things look for me in the future in the Army.

Social satisfaction:

1. The people I talk to and work with on my job.
2. The chance to get to know other people while on the job.
3. The chance to help other people while at work.

Supervisory satisfaction:

1. The degree of respect and fair treatment I receive from my boss.
2. The amount of support and guidance I receive from my supervisor.
3. The overall quality of the supervision I receive in my work.

Growth satisfaction:

1. The amount of personal growth and development I get in doing my job.
2. The feeling of worthwhile accomplishment I get from doing my job.

3. The amount of independent thought and action I can exercise in my job.
4. The amount of challenge in my job.

Army satisfaction used a 5-point Likert scale from 1=strong negative effect, 2=negative effect, 3=no effect, 4=positive effect, to 5=strong positive effect.

Which answer best indicates what type of effect, if any, your Army service has on various aspects of your life?

1. Development of specific job skill that will be useful to you as a civilian.
2. Self-confidence.
3. Leadership ability.
4. Ability to work with others as a team.
5. Respect for authority.
6. Pride in self.
7. Openness to new ideas.
8. Pride in serving your country.
9. Ability to make friends.
10. Establishing independence.
11. Self-discipline.

Horizontal bonding used a 1-5 Likert scale with 1=yes, very much, 2=yes, much, 3-somewhat, 4-no, little, 5-none at all, very little.

1. Do the soldiers in your unit make each other feel like doing a good job?
2. How well do the soldiers in your unit work together?
3. On the average, how well do the soldiers you work with do their jobs?
4. How many soldiers in your unit do you think are good soldiers?
5. How often do the members of your unit work hard to get things done?

Mael, F. A. (1989). Measuring Leadership, Motivation, and Cohesion Among U.S. Army Soldiers. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A219 924).

I. Horizontal Squad Member Cohesion

1. The soldiers in my platoon really care about each other
2. The soldiers in my platoon work well together as a team
3. The soldiers in my platoon hang out together
4. Platoon members work together to get the job done
5. Squad members in this platoon trust each other
6. When I face a difficult task other members of my platoon help out

II. Horizontal Leader Cohesion

1. The leaders in this platoon trust each other
2. The leaders in this platoon really care about each other
3. The leaders in this platoon work together to get the job done
4. The leaders of this platoon do not get along with each other

I. Job Involvement

1. My job helps me to achieve my personal goals.
2. I avoid taking on extra duties and responsibilities in my work with my unit
3. I used to be more ambitious about my work than I am now
4. I look forward to coming to work every day

II. CTC Motivation

1. It really matters to me that we do well at the CTC
2. I put in extra effort to prepare for the CTC
3. I really don't care about how I perform at the CTC.

Organizational Identification

1. When someone criticizes the Army, it feels like a personal insult
2. I'm interested in what others say about the Army
3. When I talk about the Army, I usually say we instead of they
4. The Army's successes are my successes
5. When someone praises the Army, it feels like a personal compliment.

I. Initiating Structure Scale and Statistics

1. Maintains high standards of performance for our squad
2. Insists that we follow standard operating procedures (SOP)
3. Knows Army-tactics and war-fighting
4. Assigns group members to particular tasks
5. Takes full charge when emergencies arise

II. Consideration Scale and Statistics

1. Treats us fairly
2. Looks out for the welfare of his people

3. Encourages us to work together as a team
4. Is friendly and approachable
5. Settles conflicts when they occur in the platoon

A. Participative Leadership

1. Lets us help with planning the mission
2. Lets us have a lot of say in how we do our work
3. Permits us to use our own judgement in solving problems

B. Micromanagement

1. Personally supervises every detail of the platoon's work
2. Constantly checks up on what the platoon members are doing

IV. Boss Stress Scales and Statistics

1. Becomes unpleasant with me when he is under pressure
2. Is constantly changing the directions he gives to me
3. Does not tell me what he expects from me
4. Shows favoritism within the platoon
5. He expects me to do too much in too little time.

V. Upward Influence Scale and References

1. Gets along well with the people above him
2. Keeps the platoon in good standing with higher authorities
3. His word carries weight with superiors
4. Gets what he asks for from his superiors
5. Is well respected by fellow leaders
6. Is considered someone with a real future in the Army

Siebold, G. L., & Kelly, D. R. (1988). Development of the Combat Platoon Cohesion Questionnaire. (ARI Technical Report 817). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Description:

Describes the development and properties of an in-depth measure of cohesion at the platoon level. The instrument measures three types of bonding: horizontal (bonding among peers), vertical (bonding between leaders and subordinates) and organizational (bonding between all platoon members and their platoon and the Army).

Sample:

1015 soldiers in 70 infantry platoons across 4 posts.

Measure:

79-items yielding three horizontal bonding scales, two vertical bonding scales, and six organizational bonding scales. All scales use a 7-point scale (coded 0-6) with the exception of the HB Instrumental scale (items 37-42), which uses a 5-point scale (coded 0-4). Mean scores, standard deviations, and alpha coefficients were computed at the individual and platoon level. (I=individual, P=platoon)

Horizontal Bonding scales:

HB - Affective - (items 31-36): extent to which first term soldiers in a platoon trust and care about one another. (Alpha I=.86, alpha P=.91)

HB - Affective, Leaders (items 49-51): extent to which leaders in a platoon trust and care about one another. (Alpha I=.82, alpha P=.91)

HB - Instrumental (items 37-42): how well the first term soldiers work together as a team. (Alpha I=.83, alpha P=.91)

Vertical Bonding scales:

VB - Affective (items 43-48): extent to which the first term soldiers and leaders care about each other. (Alpha I=.91, alpha P=.97)

VB - Instrumental (items 52-58): technical expertise and training skills of the leaders in the platoon. (Alpha I=.91, alpha P=.96)

Organizational Bonding scales:

OB - Affective, First term values (items 1-15): importance of key Army values to first term soldiers. (Alpha I=.95, alpha P=.97)

OB - Affective, Leader values (items 16-30): importance of these values to leaders in the platoon. (Alpha I=.95, alpha P=.98)

OB - Affective, Pride (items 64-68): how proud first term soldiers are to be a platoon member. (Alpha I=.86, alpha P=.91)

OB - Instrumental, Anomie (items 59-63): extent to which there is a rational environment for action by the platoon members. (Alpha I=.82, alpha P=.90)

OB - Instrumental, Needs (items 69-74): extent to which first term basic and social needs are being met. (Alpha I=.73, alpha P=.70)

OB - Instrumental, Goals (items 75-79) extent to which first term soldier enlistment goals are being met. (Alpha I=.83, alpha P=.86)

<u>Scale</u>	<u>Individual level</u>		<u>Platoon level</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
HB-A	3.15	1.30	3.14	.64
HB-A,L	3.53	1.42	3.50	.71
HB-I	2.46	.74	2.44	.35
VB-A	3.58	1.45	3.52	.80
VB-I	3.56	1.47	3.46	.85
OB-A,FTV	3.75	1.36	3.79	.63
OB-A,LV	4.33	1.26	4.30	.61
OB-A,P	3.47	1.45	3.40	.78
OB-I,A	4.15	1.24	4.08	.62
OB-I,N	2.58	1.18	2.57	.57
OB-I,G	2.92	1.40	2.91	.66

Eleven factors were extracted and labeled:

1. leadership
2. soldier values
3. leader values
4. soldier peer bonding
5. soldier teamwork
6. anomie
7. goals
8. social needs
9. basic needs
10. pride in platoon
11. pride in Army

Siebold, G. L., & Kelly, D. R. (1988). Development of the Combat Platoon Cohesion Questionnaire. (ARI Technical Report 817). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Combat Platoon Cohesion Questionnaire Scales

Horizontal Bonding (HB)

HB-Affective (HB-A): (items 31-36); addresses the extent that first term soldiers in a platoon trust and care about one another.

HB-Affective, Leaders (HB-A, L): (items 49-51); addresses the extent that leaders in a platoon trust and care about one another.

HB-Instrumental (HB-I): (items 37-42); addresses how well the first term soldiers work together as a team.

Vertical Bonding (VB)

VB-Affective (VB-A): (items 43-48); addresses how much the first term soldiers and leaders care about each other.

VB-Instrumental (VB-I): (items 52-58); addresses the technical expertise and training skills of the leaders in the platoon.

Organizational Bonding (OB)

OB-Affective, First Term Values (OB-A, FTV): (items 1-15); addresses the importance of key Army values to first term soldiers.

OB-Affective, Leader Values (OB-A, LV): (items 16-30); addresses the importance of the same values to leaders in the platoon.

OB-Affective, Pride (OB-A, P): (items 64-68); addresses how proud first term soldiers are to be a platoon member.

OB-Instrumental, Anomie (OB-I, A): (items 59-63); addresses the extent to which there is a rational environment for action by the platoon members.

OB-Instrumental, Needs (OB-I, N): (items 69-74); addresses the extent to which first term basic and social needs are being met.

OB-Instrumental, Goals (OB-I, G): (items 75-79); addresses the extent to which first term soldier enlistment goals are being met.

Based on your observations, HOW IMPORTANT IS EACH OF THE FOLLOWING TO THE FIRST-TERM SOLDIERS IN YOUR PLATOON? Use the scale below to make your ratings.

1. Not at all important
2. Slightly important
3. Somewhat important
4. Moderately important
5. Quite important
6. Very important
7. Extremely important

NOTE: On the answer sheet, darken the space with the letter corresponding to your rating.

1. Loyalty to the United States Army.
2. Loyalty to the unit or organization.
3. Taking responsibility for their actions and decisions.
4. Accomplishing all assigned tasks to the best of their ability.
5. Putting what is good for their fellow soldiers and mission accomplishment ahead of personal desires.
6. Dedication to serving the United States, even to risking their lives in its defense.
7. Having high moral and personal standards.
8. Commitment to working as members of a team.
9. Dedication to learning their job and doing it well.
10. Personal drive to succeed in the Army and advance.
11. Being honest, open, and truthful.
12. Taking responsibility to ensure the job gets done.
13. Being disciplined and courageous in battle.
14. Standing up for what they firmly believe is right.
15. Building and maintaining physical fitness and stamina.

Based on your observations, HOW IMPORTANT IS EACH OF THE FOLLOWING TO THE LEADERS (NCO AND OFFICER) IN YOUR PLATOON? Use the scale below to make your ratings.

1. Not at all important
2. Slightly important
3. Somewhat important
4. Moderately important
5. Quite important
6. Very important
7. Extremely important

NOTE: On the answer sheet, darken the space with the letter corresponding to your rating.

16. Loyalty to the United States Army.
17. Loyalty to the unit or organization.
18. Taking responsibility for their actions and decisions.
19. Accomplishing all assigned tasks to the best of their ability.

20. Putting what is good for their fellow soldiers and mission accomplishment ahead of personal desires.
21. Dedication to serving the United States, even to risking their lives in its defense.
22. Having high moral and personal standards.
23. Commitment to working as members of a team.
24. Dedication to learning their job and doing it well.
25. Personal drive to succeed in the Army and advance.
26. Being honest, open, and truthful.
27. Taking responsibility to ensure the job gets done.
28. Being disciplined and courageous in battle.
29. Standing up for what they firmly believe is right.
30. Building and maintaining physical fitness and stamina.

These statements are all about the FIRST-TERM SOLDIERS IN YOUR PLATOON. Use the scale printed below to select your response to each statement.

1. Strongly agree
2. Agree
3. Slightly agree
4. Borderline
5. Slightly disagree
6. Disagree
7. Strongly disagree

NOTE: On the answer sheet, darken the circle with the letter corresponding to your choice.

31. In this platoon the first-termers really care about what happens to each other.
32. Soldiers here can trust one another.
33. First-termers in this platoon feel very close to each other.
34. Soldiers like being in this platoon.
35. First-termers in this platoon really respect one another.
36. Soldiers in this platoon like one another.

These statements are about the FIRST TERM-SOLDIERS IN YOUR PLATOON. For each statement, select the response that best describes your opinion.

37. Do the soldiers in your platoon make each other feel like doing a good job?
 - a. very much
 - b. pretty much
 - c. somewhat
 - d. a little
 - e. very little or not at all

38. How well do the soldiers in your platoon work together?
- very well
 - well
 - borderline
 - poorly
 - very poorly
39. To what extent do members of your platoon help each other to get the job done?
- very little
 - a little
 - to some extent
 - to a large extent
 - to a great extent
40. To what extent do members of your platoon encourage each other to succeed when in the field or at competitions?
- very little
 - a little
 - to some extent
 - to a large extent
 - to a great extent
41. Do the members of your platoon work hard to get things done?
- always
 - most of the time
 - sometimes
 - seldom
 - never
42. To what extent do the members of your platoon pull together and share the load while in the field?
- very little
 - a little
 - to some extent
 - to a large extent
 - to a great extent

These items concern the LEADERS IN YOUR PLATOON (NCO AND OFFICER). Use the scale printed below to select your response to each item.

- Strongly agree
 - Agree
 - Slightly agree
 - Borderline
 - Slightly disagree
 - Disagree
 - Strongly disagree
43. First-term soldiers respect the leaders in this platoon.
44. When a soldier in this platoon goes for help, his leaders listen well and care about what the soldier says.
45. Leaders trust the first-term soldiers in this platoon.

46. Leaders really understand the soldiers in this platoon.
47. When asked for help in solving a personal problem, leaders in this platoon do their best to help out.
48. When a soldier wants to talk, his leaders make themselves available.
49. Leaders like being in this platoon.
50. Leaders in this platoon respect each other.
51. Leaders in this platoon care about one another as individuals.
52. The leaders in this platoon are the kind that soldiers want to serve under in combat.
53. The leaders in this platoon can really apply their knowledge to solve problems in the field.
54. The chain of command works well around here.
55. The leaders keep their soldiers well informed about what is going on.
56. Leaders keep themselves informed about the progress soldiers are making in their training.
57. The leaders in this platoon are experts and can show the soldiers how best to perform a task.
58. The leaders work right along with their soldiers under the same hardships in the field.

These are statements about the environment in your platoon. Use the scale printed below to select your response to each statement.

1. Strongly agree
2. Agree
3. Slightly agree
4. Borderline
5. Slightly disagree
6. Disagree
7. Strongly disagree

59. The people in this platoon know what is expected of them.
60. Rules are consistently enforced.
61. The reasons for being rewarded or promoted are well known.
62. The behaviors that will get you in trouble or punished are known.
63. The priorities in this platoon are clear.

These statements about the FIRST TERM SOLDIERS IN YOUR PLATOON.

64. The soldiers in this platoon feel they play an important part in accomplishing the platoon's mission.
65. Soldiers here are proud to be in this platoon.
66. First-term soldiers feel this platoon's wartime mission is very important.
67. The soldiers in this platoon are proud to be in the Army.
68. First-term soldiers feel the Army has an important job to do in defending the United States in today's world.

How satisfied are the FIRST-TERM SOLDIERS IN YOUR PLATOON with the following aspects of platoon life?

1. Completely satisfied
 2. Satisfied
 3. Slightly satisfied
 4. Borderline
 5. Slightly dissatisfied
 6. Dissatisfied
 7. Completely dissatisfied
69. The food served in the platoon dining facility.
70. The quality of the barracks or other on-post housing.
71. The availability of good off-post housing.
72. The time available for personal needs like going to the PX, cleaners, bank or barber shop.
73. The time available to spend with friends or family.
74. The quality and frequency of platoon parties and social gatherings.

Next are some more statements about THE FIRST-TERM SOLDIERS IN YOUR PLATOON.

1. Strongly agree
 2. Agree
 3. Slightly agree
 4. Borderline
 5. Slightly disagree
 6. Disagree
 7. Strongly disagree
75. All in all, the duties soldiers perform in this platoon make them feel like they are serving their country.
76. Soldiers in this platoon have opportunities to better themselves.
77. Soldiers in this platoon can make progress toward achieving their educational goals.
78. Around here you can get the skills and training you want.
79. Soldiers assigned to this platoon can maintain a good standard of living.

For these general statements about your platoon.

80. This platoon is very cohesive.
81. There is a very high degree of teamwork and cooperation among first-term soldiers in this platoon.
82. The first-term soldiers in this platoon get along very well with one another.
83. In this platoon, the leaders really care about what happens to the first-term soldiers.
84. Overall the leaders in this platoon are very good.
85. Even if this platoon was under a great deal of stress or difficulty, it would pull together to get the job done.
86. This a very high performing platoon.
87. The leaders in this platoon appreciate the contributions of the first-term soldiers.

88. The first-term soldiers appreciate the contributions of the leaders in the platoon.

For each of the next statements, ABOUT YOUR PLATOON, use the scale printed below to select your response to each statement.

1. extremely high
 2. very high
 3. high
 4. moderate
 5. low
 6. very low
 7. extremely low
89. In the event of combat, describe the confidence first-term soldiers would have in each other.
90. In the event of combat, describe the confidence first-term soldiers would have in their platoon leaders.
91. In the event of combat, describe the confidence platoon leaders would have in their soldiers.
92. In the event of combat, describe the confidence platoon leaders would have in each other.
93. Describe the confidence first-term soldiers in your platoon have in their weapons and equipment.
94. How high is the morale in your platoon?
95. Describe the state of your platoon's readiness.
96. Describe the state of discipline in your platoon.
97. How high is the determination or "will" to win in combat in your platoon?
98. Describe the degree of confidence members of this platoon have that it would perform well in combat.

For each question, select the response that best describes your situation. Note: Soldiers in leadership positions should only answer those questions that apply to them.

- a. 1 - 3 months
 - b. 4 - 6 months
 - c. 7 - 9 months
 - d. 10 - 12 months
 - e. more than 12 months
99. How long have you been in your present squad?
100. How long have you been in your present platoon?
101. How long have you been in your present company?
102. How many different squad leaders have you had since you have been assigned to this squad or section?
- a. have had the same squad leader all along
 - b. two different squad leaders
 - c. three different squad leaders
 - d. four or more different squad leaders

103. How many different squad leaders have you had since you have been assigned to this platoon?
- have had the same squad leader all along
 - two different squad leaders
 - three different squad leaders
 - four or more different squad leaders
104. How many different platoon sergeants have you had since you have been assigned to this platoon?
- have had the same platoon sergeants all along
 - two different platoon sergeants
 - three different platoon sergeants
 - four or more different platoon sergeants
105. How many different platoon leaders (lieutenants) have you had since you have been assigned to this platoon?
- have had the same platoon leaders all along
 - two different platoon leaders
 - three different platoon leaders
 - four or more different platoon leaders
106. How many different company commanders have you had since you have been assigned to this company?
- have had the same company commander all along
 - two different company commanders
 - three different company commanders
 - four or more different company commanders
107. How many different first sergeants have you had since you have been assigned to this company?
- have had the same first sergeant all along
 - two different first sergeants
 - three different first sergeants
 - four or more different first sergeants
108. Which of the following best describes your situation?
- I have worked with most (75%) of the members of my squad for 1 - 3 months
 - I have worked with most (75%) of the members of my squad for 4 - 6 months
 - I have worked with most (75%) of the members of my squad for 7 - 9 months
 - I have worked with most (75%) of the members of my squad for 10 - 12 months
 - I have worked with most (75%) of the members of my squad for more than 12 months

109. Which of the following best describes your career intentions at the present time?
- a. I will probably stay in the Army until retirement.
 - b. I will probably reenlist upon completion of my present but am undecided about staying until retirement.
 - c. I am undecided whether I will reenlist.
 - d. I will probably leave the Army upon completion of my present obligation.
 - e. I will probably leave the Army before completion of my present obligation.

This questionnaire is designed to help your Company Commander assess the general level of cohesiveness in your platoon. Fill in the information below. Questions 114, 126, and 127 have separate scales.

Write in Your	Platoon:	Check your Paygrade	E1-E4
	Company:		E5-O2

- a. Strongly agree
 - b. Agree
 - c. Borderline
 - d. Disagree
 - e. Strongly disagree
110. First-termers in this platoon uphold and support Army values.
111. Leaders in this platoon set the example for Army values.
112. First-termers trust each other in this platoon.
113. First-termers in this platoon care about each other.
114. How well do first-termers in your platoon work together to get the job done?
- a. Very well
 - b. Well
 - c. Borderline
 - d. Poorly
 - e. Very poorly
115. First-termers in this platoon pull together to perform as a team.
116. Leaders in this platoon trust each other.
117. Leaders in this platoon care about each other.
118. First-termers in this platoon can get help from their leaders on personal problems.
119. Leaders and first-termers in this platoon care about one another.
120. Leaders and first-termers in this platoon train well together.
121. Leaders in this platoon have the skills and abilities to lead first-termers into combat.
122. First-termers in this platoon know what is expected of them.
123. In this platoon the behaviors that will get you in trouble are well known.

124. First-termers in this platoon feel they play an important part in accomplishing the unit's mission.
125. First-termers are proud to be members of this platoon.
126. How satisfied are the first-termers in this platoon with the time available for family, friends and personal needs?
- a. Very satisfied
 - b. Slightly satisfied
 - c. Borderline
 - d. Slightly dissatisfied
 - e. Very Dissatisfied
127. How satisfied are the first-termers with the social events in this platoon?
- a. Very satisfied
 - b. Slightly satisfied
 - c. Borderline
 - d. Slightly dissatisfied
 - e. Very Dissatisfied
128. First termers in this platoon feel they are serving their country.
129. First-termers in this platoon have opportunities to better themselves.

Siebold, G. L., & Kelly, D. R. (1988). Development of the Platoon Cohesion Index. (ARI Technical Report 816). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Description:

Report describes the development and properties of the Platoon Cohesion Index (PCI), which measures cohesion in Army platoons. Cohesion is conceptualized in terms of horizontal, vertical and organizational bonding.

Sample:

44 platoons of light and mechanized infantry from 2 posts (N=767 soldiers)

Measure:

There are 20 PCI items, all rated on a five-point scale with weights from +2 to -2. PCI items were added to the end of the Combat Platoon Cohesion Questionnaire to form a 129-item measure consisting of 79 basic CPCQ items, 19 criterion and linkage items, 11 turbulence items, and the 20 PCI items. Alpha reliabilities for scales were not reported, but inter-item correlations are all significant.

Horizontal Bonding scales:

- HB- Affective - (items 3-4)
- HB - Affective, Leaders (items 7-8)
- HB- Instrumental (items 5-6)

Vertical Bonding scales:

- VB - Affective (items 9-10)
- VB - Instrumental (items 11-12)

Organizational Bonding scales:

- OB - Affective, First term values (item 1)
- OB - Affective, Leader values (item 2)
- OB - Affective, Pride (items 15-16)
- OB - Instrumental, Anomie (items 13-14)
- OB - Instrumental, Needs (items 17-18)
- OB - Instrumental, Goals (items 19-20)

<u>Scale</u>	<u>Individual level</u>		<u>Platoon level</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
HB-A	2.14	.82	2.38	.49
HB-A,L	2.45	.90	2.45	.42
HB-I	2.71	.84	2.66	.50
VB-A	2.40	.91	2.38	.38
VB-I	2.51	.90	2.49	.44
OB-A,V	2.39	.78	2.37	.37
OB-A,P	2.43	.92	2.42	.51
OB-A,A	2.85	.77	2.82	.33
OB-I,N	1.72	1.09	1.70	.53
OB-I,G	2.16	.94	2.16	.43

Smith, A. L. (1988). Multivariate analysis of determinants of reenlistment: A decision-making model for enlisted personnel. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A199 083).

Description:

This research was designed to develop a model of variables affecting career decision making.

Sample:

Over 1,200 enlisted personnel with 8 months of expiration of service completed the questionnaire in 1986 and 1987. A total of 1, 236 soldiers who were eligible for reenlistment and within 8 months of ETS completed the reenlistment incentives and disincentives inventory. Soldiers were located at 9 CONUS sites and numerous locations in Germany and Korea.

Measure:

The Reenlistment Incentives and Disincentives Questionnaire included scales of organizational commitment and job satisfaction.

Most of the 14 items in the Organizational Commitment scale followed from the psychological approach to commitment of Porter, et al. That is, they are related to the individual sense of involvement, attachment and identification with the Army and as such did include items directly related to remaining in the organization such as "I consider myself a soldier first and foremost"; "I intend to make the Army a career".

Reliability for this scale is .88. The mean value for the organizational commitment scale was 36.40 with a standard deviation of .975, a minimum value of 12 and a maximum of 60.

The 16 items on the Satisfaction with Army Life scale covered satisfaction with areas such as: vocational skills acquired, the job, superiors, the quality of life, benefits, location and "overall" satisfaction. Alpha was .86. Satisfaction with Army life had a mean value of 40.81, standard deviation of 10.20, minimum value of 14 and maximum of 69.

Smith, A. L. (1988). Multivariate analysis of determinants of reenlistment: A decision-making model for enlisted personnel. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A199 083).

Organizational Commitment items:

1. I would stay in the Army for 20 years or more even if I can retire earlier.
2. I would leave the Army for a civilian job with the same pay.
3. I am more loyal to the Army than the average person is to their employing organization.
4. I am proud to be in the Army.
5. I would leave the Army for a civilian job with the same status.
6. It would take a lot to convince me to stay in the Army beyond this enlistment.
7. If I had it to do all over again I would not have stayed in the Army for more than one enlistment.
8. I consider my values to be in agreement with the Army's values.
9. I intend to make the Army a career.
10. I consider myself a soldier first and foremost.
11. I would leave the Army for a civilian job with the same benefits.
12. I would encourage young people to make the Army their career.
13. The Army offers a wide variety of opportunities to find a job you can enjoy.
14. Army service is of great value in your civilian career development.
15. the Army experience gives you an advantage over going right from high school to college.
16. Army service is an experiences you can be proud of.
17. The Army offers the opportunity to develop your potential.

The rating scale for organizational commitment is 1=strongly disagree, 2=disagree, 3=neither agree/disagree, 4=agree, 5=strongly agree.

Satisfaction with Army Life items:

How satisfied are you with:

1. Your current location.
2. Your job.
3. Your family life.
4. Vocational skills you have acquired.
5. The Army as an organization.
6. Your chain of command.
7. Your professional development.
8. The salability of your skills in the civilian world.
9. The amount of education you have now.
10. Leadership demonstrated by your superiors.
11. The effect the Army has on your personal life.
12. "Quality of life" in the Army.

13. The opportunity for improving your education.
14. Taking all the above things into consideration, what is your underlying/overall satisfaction with the Army?

The satisfaction items were scaled from 1= very dissatisfied, 2= somewhat dissatisfied, 3= neither satisfied nor dissatisfied, 4= somewhat satisfied, and 5= very satisfied.

Sterling, B., & Allen, J. (1983). Relationships among organizational attitudes, work environment, satisfaction with human resource programs and benefits, and Army career intentions. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A139 864).

Description:

This research examined the relationship of attitudes toward the Army, duty environment and satisfaction with Army programs and benefits to the career intentions of officers and enlisted personnel.

Sample:

The survey used was the 1979 Assessment of Quality of Life Program consisting of 178 items. Subjects completing the original survey yielded a sample of over 50,000. A random sampling of enlisted men was selected. This produced samples of 2,339 enlisted personnel and 4,360 officers.

Measure:

Four commitment factors were found which were called: pride in the Army, supervisory support, personal job commitment, and self sacrifice for mission accomplishment. It is not clear which items load on which scales.

Factor loadings: The variables that load on the pride in the Army factor are the numbers associated with the following items.

Commitment items number 6, 8, 9, 11, 13, 14.

Supervisory support 14, 15, 16, 17.

Commitment to job 3, 4, 9.

Self-sacrifice, mission accomplishment 1, 2, 5, 8, 11, 13.

Results show that similar dimensions of commitment to the Army, satisfaction with programs, duty environment and career intentions are found within both categories of service members. Career intentions for officers, however, were more related to commitment dimensions whereas for enlisted members, career intentions were more related to overall satisfaction with Army human resource programs and with assessment of housing and pay. While around 40% of the variants in the career intentions of officers was accounted for by commitment, only 10% of the variance in the career intention of enlisted members was accounted for in these analyses.

Sterling, B., & Allen, J. (1983). Relationships among organizational attitudes, work environment, satisfaction with human resource programs and benefits, and Army career intentions. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A139 864).

Commitment items - 5-point Likert scale where 1=strongly disagree and 5=strongly agree.

1. I would try to get out of being deployed to a combat zone it ordered to do so.
2. I don't care how well I do in the Army.
3. I am willing to do more than what is expected of me to get the job done.
4. I care about what happens to the Army.
5. It annoys me to work after normal duty hours.
6. I "talk up" the Army to my friends as a good organization to belong to.
7. Accomplishing the mission is more important to me than my personal comfort.
8. I would rather work in the Army than anywhere else.
9. If a relative or friend of mine were thinking about joining the Army, I would try to discourage him/her.
10. I take a lot of pride in doing my job well.
11. I am glad that I decided to join the Army.
12. I feel little loyalty toward the Army.
13. I am proud to tell others that I am in the Army.
14. I am satisfied with my job in the Army.
15. I have enough freedom to do my job the way I think it should be done.
16. My job in the Army is very important.
17. My superiors praise me when I do a good job.
18. My superiors respect me as a person.

Whitmarsh, P. J. (1983). An assessment of job satisfaction of combat arms personnel during REALTRAIN training. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A148 312).

Description:

This study isolated dimensions of job satisfaction and determined the relationship between job satisfaction and tactical performance in a real training versus conventional tactical training environment. The job satisfaction questionnaire was administered before and after training to the respondents.

Sample:

187 soldiers assigned to the 4th Infantry Division at Ft. Carson, CO.

Measure:

Factor analysis on 24 questionnaire items indicated four dimensions of job satisfaction: unit cohesiveness, training expectations, work satisfaction and career intentions. In addition, a leadership scale was constructed from four questionnaire items.

The job satisfaction questionnaire contains 28 items written to describe the dimensions of: unit cohesiveness, training expectations, work satisfaction, career intentions, and leadership.

Ratings employ a five point Likert-type scale.

Whitmarsh, P. J. (1983). An assessment of job satisfaction of combat arms personnel during REALTRAIN training. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC No. AD-A148 312).

The job satisfaction questionnaire contains 28 items written to describe the dimensions of:

- unit cohesiveness - seven items,
- training expectations - nine items,
- work satisfaction - five items
- career intentions - three items, and
- leadership - four items.

Ratings employ a five point scale ranging from strongly agree to strongly disagree, very likely to very unlikely, extremely well trained to extremely poorly trained.

Unit cohesiveness items.

1. Men in the unit know how to get the job done right.
2. If a man needs he can normally count on the men in the unit to help.
3. The men in the unit are a good group to work with.
4. Men of the unit work together as a team.
5. Men of the unit help each other out.
6. The unit does high quality work.
7. The unit does more than enough work to get by.

Work satisfaction.

1. I like the day to day work that makes up my duty position.
2. The people I work with make me want to work hard.
3. The conditions I work under make me feel like doing my best.
4. My day to day work makes me feel like I am doing something worthwhile.
5. All in all, I am satisfied with my job in the Army.

Yoest, E. E., & Tremble, T. R. (1985). Impact of Cohesion on Leader Behavior- Outcome Relationships. In A. D. Mangelsdorff, & J. M. King (Eds.), Cohesion and motivation: Multi-national efforts in the Armed Forces. Fort Sam Houston, TX: Army Health Care Studies and Clinical Investigation Activity. (DTIC No. AD- A159 940).

Description:

Questionnaire study of the association between cohesion and leader-subordinate relationships.

Sample:

Questionnaire data were collected from 2,274 first-term soldiers in 39 US Army units.

Measure:

Cohesiveness was measured by 3 scales. All scale values were a five-point continuum and part of an 85 item questionnaire used to evaluate the program.

One scale was an overall indicator of attraction to an organization in terms of its reverse resistance to leaving it. This measure combined perceptions of the likelihood of own and other soldiers' rejection of an offer to transfer to another unit.

The other two scales measured cohesion in terms of evaluations of the quality of work relationships and inter-personal closeness of soldiers in a unit.

The items in the leadership scales elicited ratings of the NCO with whom a soldier works most closely. Two leadership scales were examined: a people-oriented behavior scale and a task-oriented behavior scale.

Three satisfaction measures were administered, including measures of: 1) a soldier's own adjustment, 2) unit morale, and 3) satisfaction with own supervisor.

Also measured perceived adequacy of training given to soldiers for the tasks required by their positions, and unit effectiveness.

Yuest, E. E., & Tremble, T. R. (1985). Impact of Cohesion on Leader Behavior- Outcome Relationships. In A. D. Mangelsdorff, & J. M. King (Eds.), Cohesion and motivation: Multi-national efforts in the Armed Forces. Fort Sam Houston, TX: Army Health Care Studies and Clinical Investigation Activity. (DTIC No. AD- A159 940).

Cohesion - measured by 3 scales. All scale values were a five-point continuum and part of an 85 item questionnaire used to evaluate the program.

1. Overall attraction to Army-

This measure combined perceptions of the likelihood of own and other soldiers' rejection of an offer to transfer to another unit.

2. Quality of work relationships

How well do unit members...

1. do their jobs,
2. perform in training settings,
3. perform as good soldiers,
4. work as a team,
5. work hard to get the job done, and
6. make each other feel like doing a good job.

3. Interpersonal closeness:

How much do you...

1. like other unit members with whom you work,
2. caring about what happens to other unit members with whom you work,
3. trust other unit members with whom you work.

Leadership: People-oriented behavior scale:

How much has the NCO with whom you work most closely...

1. listened to and cared about problems of soldiers seeking help,
2. understood guys in the unit,
3. helped people solve their problems, and
4. been available when soldiers wanted to talk.

Leadership: Task-oriented behavior scale:

How much has the NCO with whom you work most closely...

1. done a good job,
2. shown soldiers how best to perform their jobs and
3. made soldiers feel like winners when they had done well.

Satisfaction measures:

1. Soldier's own adjustment:
 - a. own morale -- improvement in opinion about the Army,
 - b. usual mood, and
 - c. overall adjustment to the Army;
2. Unit morale:
 - a. overall morale in the unit,
 - b. reasonableness of rules in the unit, and
 - c. feeling that the unit is concerned about the soldier as an individual; and
3. Satisfaction with own supervisor -- one item scale.

Perceived adequacy of training given to soldiers for the tasks required by their positions. (no item wording given)

Unit effectiveness scale:

Perceptions about:

1. overall unit effectiveness,
2. time required to make the unit combat ready ,and
3. the likely combat effectiveness of the unit.